

# **10-Year Plan Tribal Consultation Meeting**

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**U.S. Department of Energy (DOE)  
Office of Legacy Management (LM)**

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# Office of Legacy Management

## Who We Are...



Sites in LM Requiring LTS&M (as of March 30, 2020)						Site Category	
CERCLA/RCRA	D&D	FUSRAP	MED/AEC Legacy Site	Nevada Offsites	UMTRCA Title I	Category 1 activities typically include records-related activities and stakeholder support	
NWPA	Plowshare/Vela Uniform Program	State Water Quality Standards	UMTRCA Title II			Category 2 activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support	
						Category 3 activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support	
						D/P = Disposal/Processing DR = Decommissioned   03/2020	



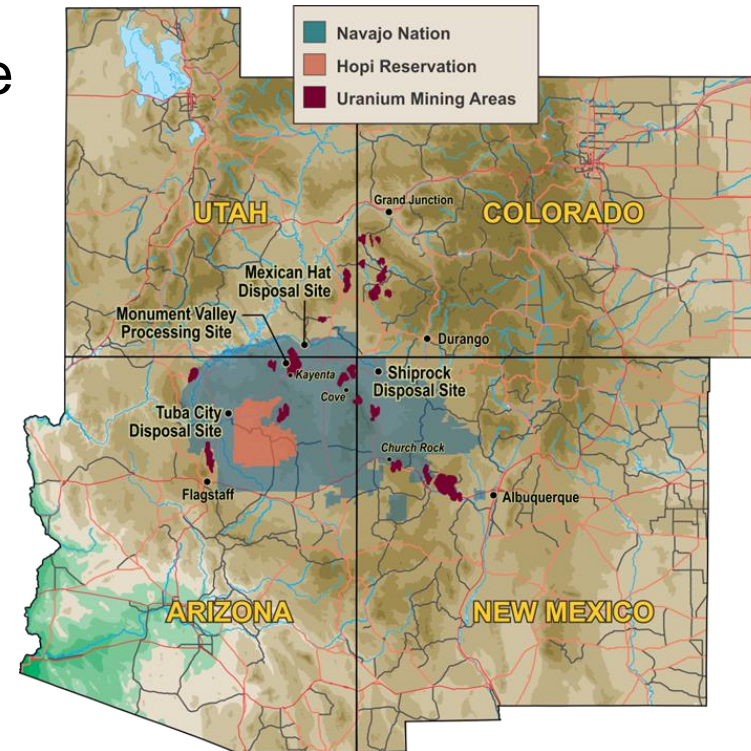
# Program Overview

- LM is regulated by the U.S. Nuclear Regulatory Commission
- U.S. Environmental Protection Agency (EPA) has no regulatory role in the Uranium Mill Tailings Radiation Control Act (UMTRCA)
  - Navajo Nation (NN) Uranium Mill Tailings Remedial Action (UMTRA) program consults with technical staff at NN EPA
- UMTRCA requires DOE to have cooperative agreements with the tribes.
  - NN UMTRA program (1999)
    - NN UMTRA is building capacity to better review DOE-LM documents
    - Funded the Navajo Cooperative Agreement \$450,000 annually and \$616,419 in fiscal year 2020 Hopi Natural Resources (1998)
  - Quarterly meetings with NN and Hopi
- Community Outreach Network office in Window Rock, Arizona



# DOE Office of Legacy Management

- Program Overview – Office of Legacy Management
- Mexican Hat, Utah, Disposal Site
- Monument Valley, Arizona, Processing Site
- Tuba City, Arizona, Disposal Site
- Shiprock, New Mexico, Disposal Site
- Community Outreach Network Office, Window Rock, Arizona



# LM Responsibilities for Navajo Nation Sites

- Inspections
- Groundwater Compliance Action Plan (GCAP) for three sites
- Long-term groundwater monitoring, surveillance, and maintenance activities
- Provide space and personnel for the Community Outreach Network office
  - Continue with outreach activities





# Mexican Hat, Utah, Disposal Site



Test strip on the disposal cell during the 2019 geotechnical sampling materials testing



# Mexican Hat, Utah, Disposal Site (continued)

- 2020: Collaborative Geotechnical Investigation Analysis Report (GIAR) review
- 2021: Alternatives Evaluation Report (AER)
  - Develop draft AER
  - Develop conceptual designs identified in the AER
- 2022: Develop design drawings and specifications
  - Implement corrective actions along the NE side slope
- Community updates through open houses, site tours, door-to-door notifications, and meeting with cooperating agencies and chapter leaders





# Mexican Hat, Utah, Disposal Site (continued)

- Interim Cover Protection Project Outreach trailer:
  - Poster board with four-year timeline of annual events
  - Information sheets
  - Water, sunscreen, and electrolyte powder
  - Recycle and trash bins
  - Walkie-talkie
- Invite community members and visitors to the project





# Monument Valley, Arizona, Processing Site

- 2021: further site characterization and data interpretation
- 2021: National Lab Network collaboration – investigate research technologies pertaining to groundwater remediation
- 2022: develop Groundwater Compliance Action Plan (GCAP)
  - May need to develop institutional controls (ICs) based on the GCAP
    - Discussions with Navajo Nation to secure durable and enforceable ICs
  - Increase community updates through open houses, site tours, door-to-door notifications, and meeting with cooperating agencies and chapter leaders



# Tuba City, Arizona, Disposal Site

- Implement new strategies for groundwater cleanup
  - Remove contaminant mass in source area
  - Conduct active remediation on leading edge of nitrate plume
  - Implement groundwater-bypass/hydraulic control to limit spread of contamination in groundwater
  - Restrict groundwater recharge using plantings in source areas
- Continue to engage research facilities, such as Savannah River National Laboratory
- Revise groundwater corrective action strategy to improve effectiveness
- Continue to monitor and evaluate progress of remediation





# Tuba City, Arizona, Disposal Site (continued)





# Shiprock, New Mexico, Disposal Site

- Replace pond or pond liner
  - Evaluate alternatives for groundwater remediation system evaporation pond liner
  - Decommission existing pond liner and dispose of affected waste material
  - Conduct Environmental Assessment of options for the evaporation pond
- Evaluate groundwater remediation approach and conduct studies to develop and support future remediation efforts
  - Implement revisions to the site groundwater compliance strategy
  - Continue active groundwater remediation
- Revise groundwater compliance strategy
  - Continue active remediation of groundwater contamination in floodplain
  - Control hydraulic driving forces in contamination-source zone
  - Develop geochemical methods to immobilize contaminants in the ground
- Form collaborative partnerships with educational institutions to build engineering capacity in Navajo community



# Shiprock Site – Evaporation Pond (2018)



# Community Outreach Network Office Window Rock, Arizona

- Develop a communication strategy for the Network to expand outreach opportunities, grow and encourage visitor traffic to the office from federal partners and tribal members and stakeholders
- Develop and participate in additional Navajo Nation and Hopi STEM outreach events
- Facilitate communication among the agencies and coordinate participation in local events on behalf of the network





# Contact Information

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# Questions?

# Mexican Hat, Utah, Disposal Site – NE Side Slope





# Conceptual Sketch of Tuba City Bypass System

